

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A digital still camera comprising:
  - a photographing optical system that forms a subject image by capturing a subject;
  - a body, to which said photographing optical system is connected;
  - an image sensor provided in said body behind said photographing optical system along an optical axis defined by said photographing optical system, light from said photographing optical system passing through a light-path space formed between said photographing optical system and said image sensor along the optical axis, the subject image being formed on a light-receiving area of said image sensor by the light;
  - a half mirror, provided in said light-path space and inclined toward the photographing optical system, that directs the light from said photographing optical system toward said image sensor and along a focus detecting direction distinct from the optical axis;
  - a mirror driver that temporarily moves said half mirror to a predetermined position such that said half mirror does not interrupt a light-path of the light directed from said photographing optical system to said light-receiving area;
  - a phase difference focus detector provided outside said light-path space and

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along the focus detecting direction, that detects whether the subject image is focused in accordance with a phase difference of light directed by said half mirror;

a focus adjuster ~~positioned under said light-path space~~ that focuses the subject image in accordance with the phase difference, said focus adjuster comprising a focusing lens; and

a recording processor that exposes said image sensor for a predetermined period, controls said mirror driver to temporarily move said half mirror out of said light-path space while said image sensor is exposed, controls said focus adjuster to temporarily shift said focusing lens along the optical axis by an optical path length of said half mirror while said image sensor is exposed, and records the subject image as data in a recording medium provided in said body;

wherein said half mirror is positioned in said light-path space such that all of the light directed from said photographing optical system to said image sensor substantially passes through said half mirror.

2. (Previously Presented) The digital still camera of claim 1, wherein a size of said half mirror is at least equal to a size of said light-receiving area and said half mirror is angled with respect to the optical axis such that a projection area of said half mirror along the optical axis is at least equal to the size of said light-receiving area.

3. (Cancelled)

4. (Original) The digital still camera of claim 1, further comprising a viewfinder that forms an observed optical subject image.

5. (Original) The digital still camera of claim 1, further comprising an incident light metering processor that detects brightness of the subject in accordance with the subject image formed on said light-receiving area.

6. (Previously Presented) The digital still camera of claim 1, further comprising:  
a moving image display for displaying the subject image as a moving image; and  
a displaying processor that displays the subject image on said display on the basis of pixel signals read from said image sensor.

7. (Previously Presented) The digital still camera of claim 6, wherein said moving image display is provided in said body, and

wherein said body includes a magnifying optical system that magnifies the subject image displayed on said moving image display, said magnifying optical system being positioned behind said moving image display such that the subject image is observable from outside of said body.

8. (Previously Presented) The digital still camera of claim 6, wherein said moving image display is provided on a back surface of said body.

9. (Cancelled)

10. (Previously Presented) The digital still camera of claim 1, further comprising a shutter provided between said half mirror and said image sensor, and configured to open and close,

wherein said recording processor temporarily closes said shutter until said half mirror is moved out of said light-path space and opens said shutter for a given period after said half mirror is moved out of said light-path space.

11. (Previously Presented) The digital still camera of claim 1, wherein said photographing optical system is an interchangeable optical system used with an SLR (Single Lens Reflex) camera using a photographic film.

12. (Currently Amended) A digital still camera comprising:  
a photographing optical system that forms a subject image by capturing a subject;  
a body, to which said photographing optical system is connected;  
an image sensor provided in said body behind said photographing optical system along an optical axis defined by said photographing optical system, light from said photographing optical system passing through a light-path space formed between said photographing optical system and said image sensor along the optical axis, the subject image being formed on a light-receiving area of said image sensor by the light;

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a half mirror, provided in said light-path space and inclined toward said photographing optical system, that directs the light from said photographing optical system toward said image sensor and along a focus detecting direction distinct from the optical axis;

a mirror driver that temporarily moves said half mirror to a predetermined position such that said half mirror does not interrupt a light-path of the light directed from said photographing optical system to said light-receiving area; and

a phase difference focus detector provided outside said light-path space and along the focus detecting direction, that detects whether the subject image is focused in accordance with a phase difference of light directed by said half mirror;

a focus adjuster that focuses the subject image in accordance with the phase difference, said focus adjuster comprising a focusing lens; and

a recording processor that controls said focus adjuster to temporarily shift said focusing lens along the optical axis by an optical path length of said half mirror while said image sensor is exposed,

wherein said half mirror is positioned in said light-path space such that all of the light directed from said photographing optical system to said image sensor substantially passes through said half mirror.

13. (Canceled)